The identification and study of density of Rotatoria in Anzali wetland in comparison with estuary region and Caspian Sea

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Receive date: 2014.09.07
Acceptant date: 2015.03.01

Abstract
The identification and density of Rotatoria of the Anzali wetland and estuary region of Caspian Sea was studied for a period of seven months with an interval period of 45 days periods from February 2010 to September 2011. Five sampling stations were selected for this study, three stations in the Anzali wetland, one station in the estuary region, and another station in the Caspian Sea. Sampling was done with using Polica pipe and suction system for 30 liters and filtering it by plankton net with 30 micron mesh size. The results showed that thirty geneses identified from phylum of Rotartoria that three genus Brachionus, Keratella and Polyarthra were dominant and this result showed eutrophic conditions of the Anzali wetland. It is evident from this study that maximum numbers of the phylum Rotifera were seen in entrance western basin station with 757 numbers in liter and Sorkhankol station with 749 numbers in liter. Results of this study showed that number of two phylum of Rotatoria in February were higher than those in other months; this number was 497 numbers in liter. Also the highest density of Rotatoria to compare with estuary region and Caspian Sea was in the Anzali wetland, after that density in the estuary region was higher than Caspian Sea. The lowest density was in the Caspian Sea. Statistical analysis showed that average density of phylum of Rotatoria in different stations had meaningful differences. Relation between chemical-physics parameters and density of Rotatoria showed that increase dissolves oxygen and pH and water temperature caused increase density of them and increase salinity caused decrease density of them.

Keywords: Anzali wetland, Rotatoria, Caspian Sea, Estuaryregion, physico-chemical parameters.